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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,946	07/25/2003	Charles E. Watkins	20457/09000	3667
27530	7590	04/05/2006	EXAMINER	
NELSON MULLINS RILEY & SCARBOROUGH, LLP 1320 MAIN STREET, 17TH FLOOR COLUMBIA, SC 29201			GUIDOTTI, LAURA COLE	
			ART UNIT	PAPER NUMBER
			1744	
DATE MAILED: 04/05/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/627,946

Applicant(s)

WATKINS, CHARLES E.

Examiner

Laura C. Guidotti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10202003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 26-41 (group II) in the reply filed on 13 March 2006 is acknowledged.

***Information Disclosure Statement***

2. The Information Disclosure Statement of 20 October 2003 has been considered, however the two Non-Patent Literature Documents ("Webpage - Second Nature Power Heads" and "Webpage – Water Pumps, Power Heads, & Plumbing Supplies") were not included in the Applicant's submission, therefore the Non-Patent Literature Documents have not been considered.

***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "82" (Figure 6), "222" (Figure 7). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "200" (plug, Paragraph 78). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "224" has been used to designate both a partition (Page 19 Lines 2 and 4) and a port (Page 19 Line 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

6. The disclosure is objected to because of the following informalities: In paragraph 99 it is believed that there is a typographical error and that "rotatable surface pad **253**" is actually meant to state "rotatable surface pad **453**".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 26-27, 30, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtaki et al., USPN 3,983,591.

Ohtaki et al. disclose the claimed invention including a power unit having a power unit body casing (outer casing of C) and a power induction unit (3) wherein the power induction unit produces a magnetic field in response to supplied power (power supplied via 9; Column 1 Lines 53-60) and a pad unit (C', pad is 2') having at least one piece of ferrous or magnetic material (3') that moves in response to the magnetic field produced by the power induction unit (Column 1 Lines 63-66). The power unit is held against a first surface (right side of G) by an operator (via 5; Column 1 Lines 63-64) and the movable pad unit is held against a second surface (left side of G) by way of magnetic

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attraction of the movable pad unit to the magnetic field produced by the power induction unit (Column 1 Lines 63-66). The pad unit has a rotatable pad section (2') that rotates to scrub the second surface in response to the rotation of the ferrous or magnetic material (Column 1 Lines 55-63). The power induction unit receives power from a power cord (9).

8. Claims 26-27, 38, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Howard, USPN 1,357,869.

Howard discloses the claimed invention including a power unit having a power unit body casing (outer casing of 10) and a power induction unit (10) wherein the power induction unit produces a magnetic field in response to supplied power (Page 1 Lines 62-73) and a pad unit (7, pad is 6) having at least one piece of ferrous or magnetic material (7; Page 1 Lines 46-51) that moves in response to the magnetic field produced by the power induction unit (Page 1 Lines 60-71). The power unit is held against a first surface by an operator (via 12) and the movable pad unit is held against a second surface by magnetic attraction of the movable unit to the magnetic field produced by the power induction unit (Page 1 Lines 52-71). The power induction unit receives power from a power cord (11) and transformer (13).

9. Claims 26, 27, 29, and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Russell, USPN 3,646,630.

Russell discloses the claimed invention including a power unit having a power unit body casing (outer casing of 47) and a power induction unit (307, 308, 309, 310) wherein the power induction unit produces a magnetic field in response to supplied

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power (223 or see Figure 10, power supplied at 1054) and a pad unit (45, pad is 291, 292, 293, 294; Figure 6) having at least one piece of ferrous or magnetic material (301, 302, 303, 304) that moves in response to the magnetic field produced by the power induction unit (Column 4 Lines 10-17). The power unit is held against a first surface by an operator (via 217; Column 3 Lines 54-57) and the movable pad unit is held against a second surface by magnetic attraction of the movable unit to the magnetic field produced by the power induction unit (Column 4 Lines 10-17). The power unit that produces a magnetic field are a first plurality of fixation units that produce localized magnetic fields (305, 306; Column 4 Lines 14-15) and the pad unit comprises a second plurality of fixation units that are attracted to the localized magnetic fields produced by the first plurality of fixation units (301, 302, 303, 304). The power induction unit receives power from a power cord (225) and a battery (223).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
10. Claims 28 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtaki et al., USPN 3,983,591, as applied to claim 26, in view of Langenfeld, DE 3630324 and Zipperer, USPN 3,554,497.

Ohtaki et al. disclose all elements above including that the power induction unit has an electric motor (M) for rotating at a cleaning pad (2, 2'; Column 1 Lines 61-63), however Ohtaki et al. does not disclose that the electric motor rotates at least one magnet, or specifically that the magnet produces a variable magnetic field in response to the power supplied.

Langenfeld discloses a cleaning device that has an electric motor (2; see English translation of Abstract) that rotates at least one magnet (7) in response to a power supply (5). A cleaning pad (8) appears to rotate simultaneous to the magnet (7), as they are part of a same unit body (15; see Figure 2). A more thorough cleaning of glass panes is carried out through the rotational movement (see English translation of Abstract).

Zipperer discloses a magnet arrangement that has a power unit having a power unity body casing (21) and a power induction unit (22, 23, 24, 25) and a separate unit (33) that moves in response to the magnetic field produced by the power unit (Abstract). The power induction unit has a controller (26) that rotates at least one magnet to produce a variable electric field (Column 1 Lines 51-60) in response to power supplied from a source of electrical power (Column 3 Lines 7-16), wherein the other unit (33) rotates in response to the rotation of the magnet (Column 1 Lines 61-64). The power



induction unit has at least two or a plurality of electromagnets (23; Figure 3) and a control unit (26) having a control surface (button, 27) that a user controls to produce a variable magnetic field having a force of magnetic attraction (Column 1 Lines 51-60; Column 3 Lines 10-16). The other unit (33) moves in response to variations in the polarity or force of magnetic attraction of the power induction unit plurality of electromagnets (Column 1 Lines 51-60).

It would have been obvious for one of ordinary skill in the art to modify the power induction unit of Ohtaki et al. to have an electric motor so that the power induction unit will rotate, as Langenfeld teaches, so that a rotating cleaning motion is provided to the pane cleaner, and it would have been obvious for one of ordinary skill in the art to modify the power induction unit of Ohtaki et al. so that it produces a variable magnetic field through a plurality of electromagnets and a controller, as Zipperer teaches, in order to vary and control the speed at which a following unit having magnetic material rotates.

11. Claims 26-27, 31, 36-38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson, USPN 6,634,052 in view of Howard, USPN 1,357,869.

Hanson discloses the claimed invention including a "power" unit (12) having a body casing (16) and a unit that produces a magnetic field (permanent magnet 24, Column 2 Lines 19-24) and a pad unit (10) that has at least one piece of magnetic material (also 24) that moves in response to the magnetic field produced by the "power" unit (Column 4 Lines 8-19). The "power" unit (12) is held against a first surface and the pad unit (10) is held against a second surface by way of magnetic attraction (Column 4 Lines 8-19), and the magnetic material is sealed in a water impermeable material

(Column 1 Lines 62-66; Column 2 Lines 55-58) and induces agitation of the pad unit to scrub the second side of the wall (Column 1 Lines 62-66). The pad unit is positively buoyant (Column 2 Lines 51-61). The magnetic material of the pad unit is encapsulated by water impermeable material (Column 1 Lines 62-66). Hanson does not disclose that the power unit has a power induction unit that produces a magnetic field in response to supplied power.

Howard discloses all elements above, particularly a power induction unit (10) wherein the power induction unit produces a magnetic field in response to supplied power (Page 1 Lines 62-73). The power induction unit receives power from a power cord (11) and transformer (13).

It would have been obvious for one of ordinary skill in the art to substitute the permanent magnet of the "power" unit of Hanson for a power induction unit that produces a magnetic field only when power is supplied to it, as Howard teaches, so that the "power" unit does not always or permanently produce a magnetic field making the device easier for storage or placement when the cleaner is not being used.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howard, USPN 1,357,869 as applied to claim 26 in view of North, USPN 3,461,476.

Howard discloses all elements above including that the power induction unit receives power from a power cord (11; see Figure 1). Howard does not include a ground fault interrupting switch or a fuse.

North discloses a window cleaner having a power cord and a motor that further includes a fuse (68) in order to protect the circuitry of the window cleaning device (Column 4 Lines 29-31).

It would have been obvious for one of ordinary skill in the art to modify the power cord system of Howard to further include a fuse, as North teaches, in order to protect its electric components from surges in electricity.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

WO 01/00077 A1 is an autonomous cleaning device that has housing coupled by magnetic attraction. At the present time, however, there is not an English translation of this document available to the Examiner.

USPN 6,988,290 to Enoch, III et al. is a surface cleaning device employing an electric motor and magnets for cleaning a glass surface and includes many structural similarities to the Applicant's claimed invention. However, the filing date of USPN 6,988,290 is after the priority date of the present Application, and cannot be considered as prior art.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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GLADYS JP CORCORAN  
SUPERVISORY PATENT EXAMINER